

Work Order ID 95430

January-09-13 1:43:28 PM

\*95430\*

Page 1

Item ID: D3022-1

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Seat Pan

Stop

\*NS2\*

Start Date: 1/09/13 Start Qty: 1.00

\*1103  
\*1103

Cust Item ID:

Required Date: 1/29/13 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-01-10 Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3022	Rev B								
100		0.00							
*100*	FLOW WATER JET								
Waterjet									
FLOW CNC Waterjet									
2004.032									
	Memo	0.00							
	I-Cut as per Dwg D3022								
	Dwg Rev: B								
	Prog Rev: B								
	*** grind direction along 31.700" ***								
	**NO HOLES, TRANSFER DRILLED AT ASSEMBLY***								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
*110*									
QC									
Quality Control									

3 0 Jm 13-2-4

3 0 Jm 13-2-4

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____ Part No. _____ NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>  Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>  Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>  Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>									
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector				
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
<b>FAULT CATEGORY</b>															
<b>Landing Gear</b>  Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube				<b>General</b>  Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/>				Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/>				Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/>		Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/>	

**Work Order ID 95430**

\*95430\*

Page 2

January-09-13 1:43:28 PM

**Item ID:** D3022-1

Revision ID:

Item Name: Seat Pad

Start Date: 1/09/13 Start Qty: 1.00 \*1\*

Required Date: 1/29/13 Req'd Qty: 1.00 \*1\*

### Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC Quality Control	QC8- Inspect parts - second check <b>Memo</b>	0.00 0.00	<i>5nF</i> <i>B-2-S</i>			<i>3</i>			
130 <b>*130*</b> Brake NC Brake NC	Bend as per dwg <b>Memo</b>	0.00 0.00				<i>3</i>			<i>13</i>
140 <b>*140*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O <b>Memo</b>	0.00 0.00	<i>15</i> <i>B-2-S</i>			<i>3</i>			

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____	Work Order:	Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____	Part No. _____	NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear				General						
				Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>		
Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>						
Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>						
Crushed/Crimped. <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>						
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>							
Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>							
Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>							
Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>								
Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>								
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>								
Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>								

Work Order ID 95430

\*95430\*

Page 3

January-09-13 1:43:28 PM

Item ID: D3022-1

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Seat Pan

Stop

\*NS2\*

Start Date: 1/09/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/29/13 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
						Stop	
	QC:	Date:	SPC (Y/N):	Date:			*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 <b>*200*</b> Packaging	Identify as per dwg & Stock Location: <i>W/1001</i>	0.00							
Packaging	Memo	0.00							

210 <b>*210*</b> QC Quality Control	QC21- Final Inspection - Work Order Release	0.00							
	Memo	0.00							

*(3) 13-2-5*

*13/2/6 80*

*13-02-5*

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
Work Order Update <input type="checkbox"/>							Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear				General						
Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced		
Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure		
Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld		
Crushed/Crimped	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled		
Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>			
Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>			
Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>			
Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>		<input type="checkbox"/>	Other		
Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>			
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>			
Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>			

**Picklist Print**

January-09-13 1:43:27 PM

Page 1

Work Order ID: 95430

Parent Item: D3022-1

Parent Item Name: Seat Pan

Start Date: 1/09/13

Required Date: 1/29/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP C02.01.23Revised NG  
 IPP Rev:D 08-04-16 now waterjet DD verified by:EC  
 IPP Rev:E 08-12-18 as per ECN08-582 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.032 2024-T3 .032 sheet		Purchased	No			100	sf	370.1522	1.6232	47086316 20			

Location	Loc Qty	Loc Code
MAT022	370.1522	
118243	32.4962	
118523	141	
121309	68.656	
123096	27.6	
123574	100.4	
	123574	

JMR3-2-4

NCR: Yes / No

DQA: Date:

## WORK ORDER NON-CONFORMANCE / UPDATE

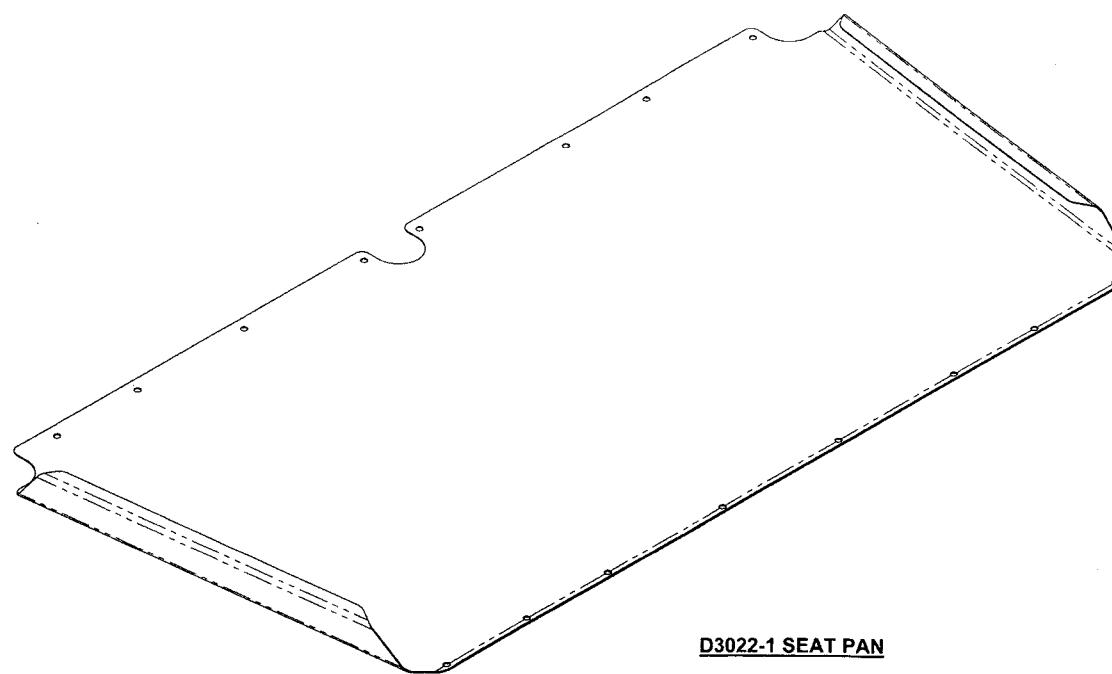
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>95430</b>
<b>Description:</b> Seat Pan	<b>Part Number:</b>	<b>D3022-1</b>
<b>Inspection Dwg:</b> D3022 <b>Rev:</b> B		<b>Page 1 of 1</b>

# **FIRST ARTICLE INSPECTION CHECKLIST**

Measured by: <u>Jm</u>	Audited by: <u>SMP</u>	Preliminary Approval:
Date: <u>13-2-4</u>	Date: <u>13-2-5</u>	Date:

Rev	Date	Change	Revised by	Approved
A	08.06.13	New Issue	KJ/DD	
B	11.06.21	Dwg Rev updated	KJ	



D3022-1 SEAT PAN

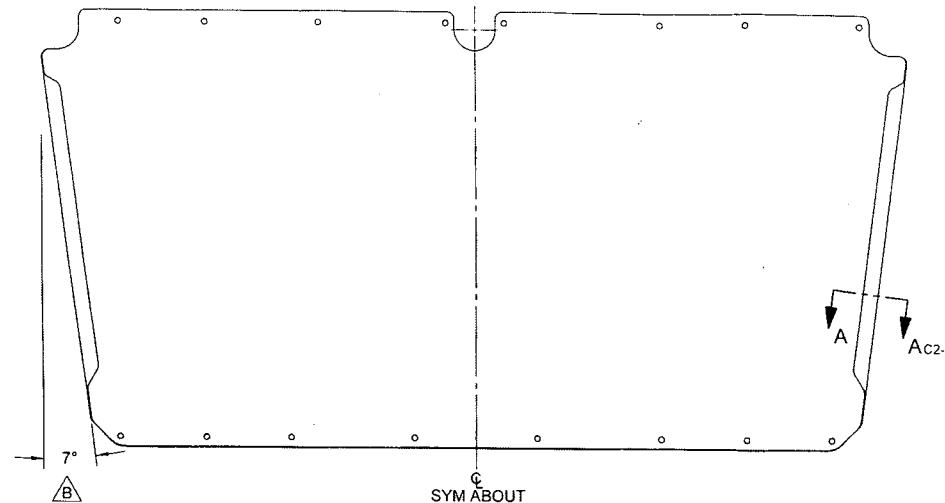
SHOP  
 RETRIEVE  
 ENGINEERING  
 UNCONTROLLED  
 SUBJECT TO AMENDMENT  
 WITHOUT  
 WORK OKAYED  
 NO 95Y30 MLC  
 13-01-10

**RELEASED**  
*06/12/15 MLC*

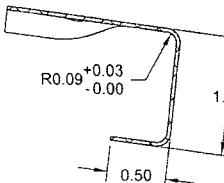
B	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS AND TRANSFERED TO "B" SIZE BORDER. SPLIT VIEWS FOR FORMED PART AND FLAT PATTERN. B7-2.7" DIM ADDED. D7-3 12.075 WAS 12.325. D6-3 9.175 WAS 9.425 & D5-3 5.300 WAS 5.550. REASON: DRAFTING ERROR.			AJS	08.11.27
A	NEW ISSUE			CP	01.05.18
REV.	DESCRIPTION			BY	DATE
DESIGN	CP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA			
DRAWN	AJS				
CHECKED		DRAWING NO.			REV. B
MFG. APPR.		D3022			SHEET 1 OF 3
APPROVED		TITLE			SCALE
DE APPR.		SEAT PAN			NTS
DATE	08.11.27	COPRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

8 7 6 5 4 3 2 1

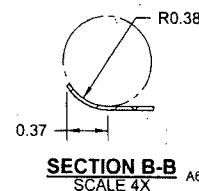
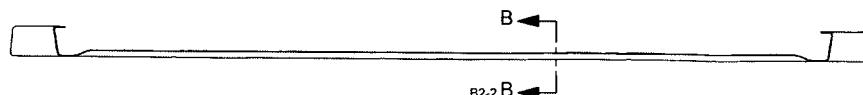
D



95430



SECTION A-A C4-2  
SCALE 4X



SECTION B-B A6-2  
SCALE 4X

D3022-1 SEAT PAN A

A) NOTES:

- 1) MATERIAL: MAKE FROM D3022-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3022-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.36 lbs

8 7 6 5 4 3 2 1

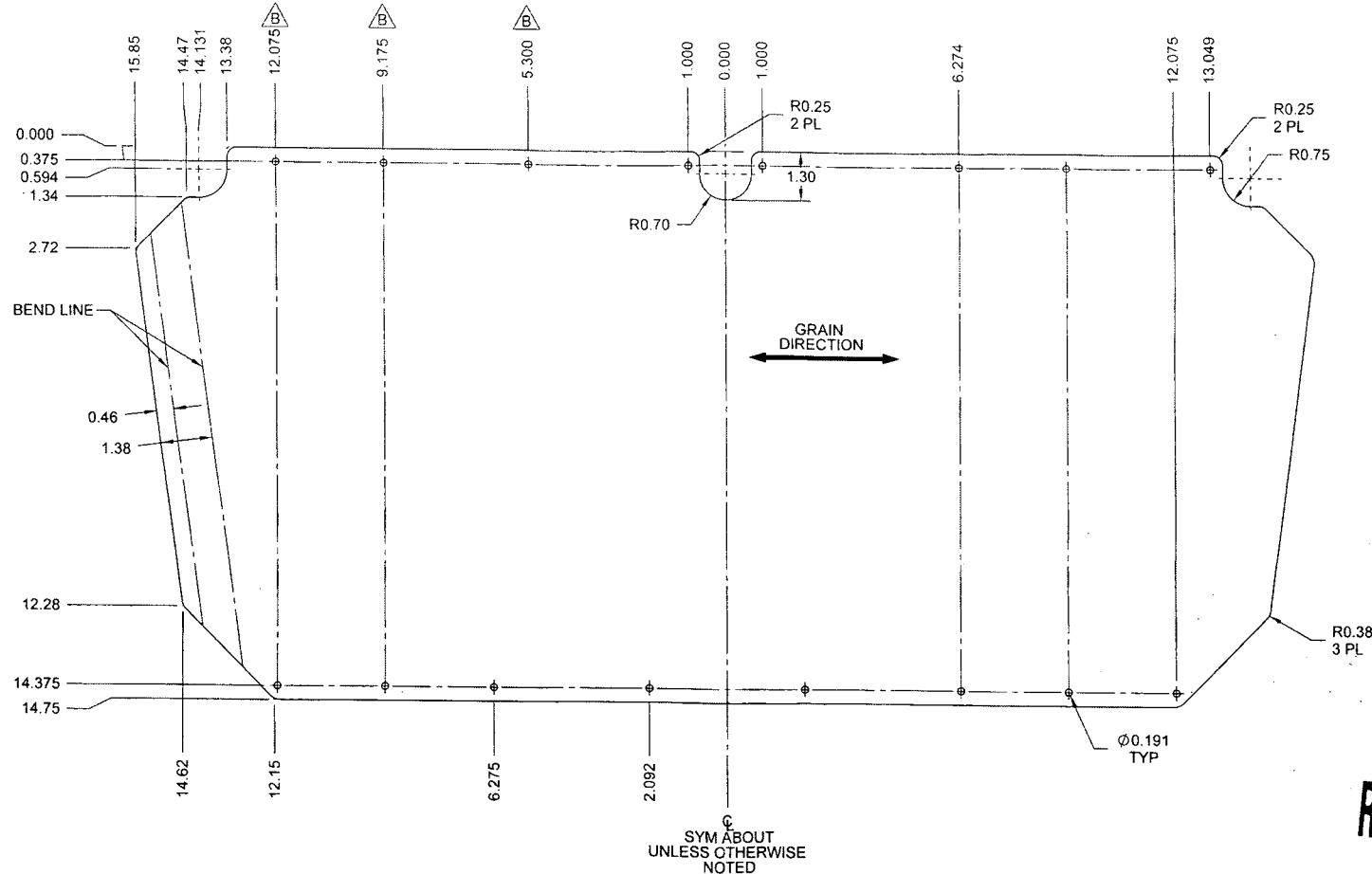
DESIGN	CP	DART AEROSPACE LTD	
DRAWN	AUS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	
MFG. APPR.		D3022	REV. B
APPROVED			SHEET 2 OF 3
DE APPR.		TITLE	SCALE
		SEAT PAN	NTS
DATE	08.11.27	COPYRIGHT © 2001 BY DART AEROSPACE LTD	

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE LTD

RELEASED  
08/12/15 MW

A

1



NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.032 THICK  
PER AMS-QQ-A-250/4 OR AMS 4037  
REF DART SPEC M2024T3S.032
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.36 lbs

**D3022-1F SEAT PAN**

RELEASED  
08/12/15 MM

DESIGN	CP	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
		REV. B
MFG. APPR.		D3022
APPROVED		SHEET 3 OF 3
DE APPR.		TITLE
DATE	08.11.27	SCALE
		NTS

COPYRIGHT © 2001 BY DART AEROSPACE LTD  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE LTD